

Mechanical structures for electronic equipment — Tests for IEC 60917 and IEC 60297

Part 2: Seismic tests for cabinets and racks

The European Standard EN 61587-2:2001 has the status of a
British Standard

ICS 31.240

National foreword

This British Standard is the official English language version of EN 61587-2:2001. It is identical with IEC 61587-2:2000.

The UK participation in its preparation was entrusted by Technical Committee EPL/48/4, Electromechanical components for electronic equipment, to Subcommittee EPL/48/4, Mechanical structures for electronic equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this Subcommittee can be obtained on request to its secretary.

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Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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This British Standard, having been prepared under the direction of the Electromechanical Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 August 2001

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 11 and a back cover.

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Amendments issued since publication

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**Mechanical structures for electronic equipment -
Tests for IEC 60917 and IEC 60297
Part 2: Seismic tests for cabinets and racks
(IEC 61587-2:2000)**

Structures mécaniques pour équipement
électronique -
Essais pour la CEI 60917 et la CEI 60297
Partie 2: Essais sismiques pour baies et
bâtis
(CEI 61587-2:2000)

Mechanische Bauweisen für elektronische
Einrichtungen -
Prüfungen für IEC 60917 und IEC 60297
Teil 2: Seismische Prüfungen für
Schränke und Gestelle
(IEC 61587-2:2000)

This European Standard was approved by CENELEC on 2001-01-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 48D/236/FDIS, future edition 1 of IEC 61587-2 prepared by SC 48D, Mechanical structures for electronic equipment, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61587-2 on 2001-01-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2001-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-01-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative .
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61587-2:2000 was approved by CENELEC as a European Standard without any modification.

MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENT – TESTS FOR IEC 60917 AND IEC 60297 –

Part 2: Seismic tests for cabinets and racks

1 Scope and object

This part of IEC 61587 specifies seismic requirements for cabinets or racks as defined in the IEC 60917 and IEC 60297 series. It applies, in whole or in part, only to the mechanical structures of cabinets or racks for electronic equipment, according to the IEC 60297 and the IEC 60917 series, and does not apply to electronic equipment or systems within the mechanical structures.

The object of this standard is to help ensure physical integrity and environmental performance in mechanical cabinets or racks, taking into account the need for different levels of performance in different applications and geographical regions. It is intended to give the user a high level of confidence in the selection of an equipment practice to meet specific needs. A specific test specimen has been selected (see figure 1).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61587. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61587 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-47:1999, *Environmental testing – Part 2-47: Test method – Mounting of components, equipment and other articles for vibration, impact and similar dynamic tests*

IEC 60068-2-57:1999, *Environmental testing – Part 2-57: Tests – Test Ff: Vibration – Time-history method*

IEC 60068-3-3:1991, *Environmental testing – Part 3: Guidance – Seismic test methods for equipment*

IEC 60297-1, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 1: Panels and racks*

IEC 60297-2, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 2: Cabinets and pitches of rack structures*

IEC 60297-3, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 3: Subracks and associated plug-in units*

IEC 60297-4, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 4: Subracks and associated plug-in units – Additional dimensions*